

## Abstract of the Disclosure

The invention is directed to a method of analyzing a plurality of biochips. In particular, the method includes inserting a first biochip in to a first station of an analysis device, inserting a second biochip into a second station of the analysis device, wherein each of the first and second biochips comprise a substrate that includes an array of detection electrodes, each including a different capture binding ligand, a different target analyte, and a label, and a plurality of electrical contacts, detecting current as an indication of the presence of the labels on the first biochip and detecting current as an indication of the presence of the labels on the second biochip.